11-89

Zero Beat

Hampden County Radio Association, Inc.

Our 42nd ARRL affiliated year
Special Service Club

Serving Greater Springfield, MA

Remarks from the President

The next meeting will be an auction which will be held at a new location, at the Agawam Junior High School, on route 57 just a few hundred yards east of the Granger School, where we have previously held the auctions. Steve Nelson will be handling that meeting. Jeff K1BE who we haven't seen much of lately will be the auctioneer. Jeff has changed from the afternoon shift and will be seen at more of the meetings.

We are summarizing the questionnaires that you filled out at the October meeting. We hope to have a report at a forthcoming meeting. One of the early observations is that there seems to be some interest in a resturaunt meeting in June. More about this later.

We are still looking for help to teach parts of a Novice class. Please look me up if you can teach one class session on any Novice subject.

Let me know if you have had any earthquake health & welfare experience. I'd like to spend a few moments on these at the November meeting.

73 de K1BXE, Yorke

Auction Information

Come one, come all!!! The time is Fall. That means it's time for the Hampden County Radio Association auction.

When? Friday, November 3, 1989. **Where?** Agawam Junior High School, Route 57, Agawam, MA. **Time?** Doors open at 6:00pm for setup and inspection. Auction starts at 7:00pm sharp!

Rules: The HCRA takes 10% off the final selling price. No minimums allowed but you may bid on your own items and if the owner is the highest bidder the HCRA will waive the 10%. The auctioneer has the right to combine items in the interest of time. The decision of the auctioneer is final. All equipment, boxes, junk, etc. must be cleaned from the school by either the buyer or seller. No disposal facilities are available at the school. All items must be marked with the call (for first and last name, if not a ham) of the seller. If the seller is not present, the call of the person bringing the items should also be clearly marked.

Note that the meeting place for the auction is different from last year. In previous years we have met at the Granger school close to the intersection of routes 57 and 187. The Junior High school is just east of the Granger school. If you are approaching

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Next meeting will be Friday, November 3rd, 7:00PM at the Agawam Junior High School

Next board meeting will be Thursday, November 9th, 7:30PM at Stan KA1ZE's house

Next VE exam will be Wednesday, November 1st, 7:00PM at the Agawam High School

Club Officers

President—Yorke Phillips, **K1BXE**
Vice President—Stan Hilinski, **KA1ZE**
Treasurer—Greg Stoddard, **N1AEH**
Secretary/Clerk—Jeanette Platanitis, **KA1MEW**

Board of Directors

Jim Sebolt, **N1DUY**
Larry Lemoine, **N1EPE**
Steve Nelson, **WA1EYF**
Cliff Junkins, **W1UWX**
Ed Goldberg, **WA1PLS**
Fred Stefanik, **N1DPM**
Frank Potts, **NC1I**
Bob Lafleur, **NQ1C**

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Feeding Hills Center from Springfield, look for the sign on your left. This new location is bigger and easier to get into.

Clean out your used equipment and parts or buy that piece of equipment you have been looking for. Coffee and donuts will be served.

For further information, contact Steve Nelson, WA1EYF, (413) 596-8216.

Product Review: the Rutland Arrays FO-12-144

by Fred Stefanik, N1DPM

With my annual trip to the Mid-Atlantic VHF Conference/Pack-Rats Hamarama, I decided to pick up a "New Toy". Tom Rutland K3IPW was there with quite an assortment of yagi antennas. Being familiar with the FO-33 432 Mhz and their performance, I thought I'd try a new 2 meter antenna, the FO-12-144.

The antenna comes in a 3" x 4" x 6' box. The hardware is nicely separated into two bags, one containing the drivel element hardware and the other containing the retainers, insulators, bolts, nuts, and hoseclamps. Careful unpacking will locate the bundle of elements in one boom section, the driven element and "T" match pieces is another, and the coax balun in the third boom section.

A quick look at the instructions reveals *every* antenna manufacture's blunder, the infamous step #1: ASSEMBLE THE BOOM?? Unless you happen to live in the Superdome, you just don't have the room to put one of these things together in your basement. I skipped this step as usual, and did it last, outside.

Step #2: Install the elements. The instructions say to measure and mark where the retainers will be on the elements from the drawing and chart on the last page. OH NO!... Metric?? Now I realize that for accuracy on a 432 Mhz yagi, measurements in millimeters are a necessity, but unless you have a meter stick or a metric tape measure, you're stuck! Man the old calculator! Millimeters divided by 25.4 equals equals inches. That's ten minutes wasted. After the conversion it was easy.

The elements mount through the boom style. This type of mounting is efficient, sturdy, and easy. Talk about sturdy, the elements on this antenna are 1/4 inch diameter rather than the usual 3/16 inch. Combined with the construction technique, this provides a very strong and sturdy antenna.

Now for the driven element. It's constructed from 1/2 inch tubing with the "T" match bars made from 3/8 inch tubing. All the driven element parts need to be de-burred. Once that was complete, assembly was smooth and easy. The last step of the match assembly is to solder the braided wire to the type N connector. This showed up what I consider the biggest flaw of the antenna, a poor quality connector. When heat was applied to the connector the dielectric material melted immediately! To cure this problem I had to replace it with an Amphenol UG-58 connector.

Assembly time seems to be about two hours. Overall, this seems to be a good antenna. Boom length is 17 feet 4 inches, gain is 12.6dB over a dipole. This number doesn't seem that good but this figure is a measured figure, on an antenna range gain measuring contest. By the way, for reference, a 215WB Cushcraft measures approximately 11.5dB over a dipole. The antenna's front to back ratio is 22dB and it exhibits a very, very clean pattern with the first sidelobes down -18dB! Bandwidth is specified as 2.5 Mhz, although it doesn't state what parameter is exceeded beyond that point, or if it is plus or minus 2.5 Mhz or 2.5 Mhz total. Price class is 135 dollars. In my opinion this antenna as "The" choice for 2 meter operation unless you can handle something like the AEA/M Squared 2m-5WL 33 foot long yagi! See you on the bands, 73's, Fred.

For Sale

7–12 element 2.2 wavelength (15 feet) 2 meter yagis (modified Cushcraft 214-B). 1dB above stock gain. $50 each.

3–KLM 144-16LBX yagis. 16 elements on a 28 foot boom. $75 each.

Contact Fred, N1DPM @ (413) 786-7943, or Stan, KA1ZE @ (203) 872-6197. We can also be found on AC1T/R 449.275

The heavy dashed lines denote protected hidden transmitter syndrome (HTS) free backbones. Nodes which are not connected into the HTS free network will list a user port into the HTS free backbone. To get into the NEDA network you must connect to that user port. From there you can connect to any other user port in the network. To connect from the network to a node outside the network it is neccesary to connect to a NEDA user port that can talk to the desired node and then to the desired node. Only a few non NEDA nodes are shown on this map. Those that are shown are connected into a NEDA node on 220 or 440 mhz.

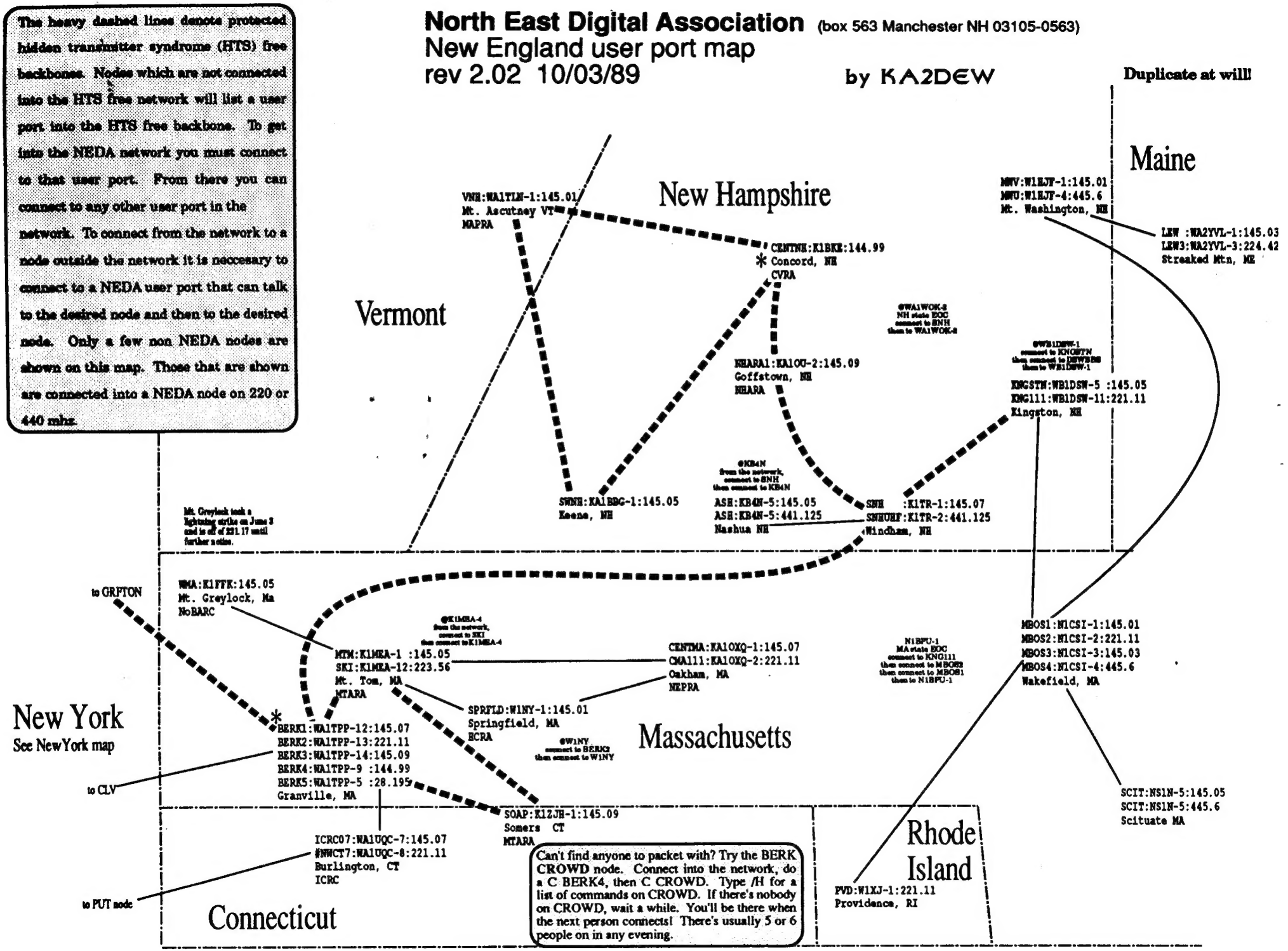
North East Digital Association (box 563 Manchester NH 03105-0563)

New England user port map

rev 2.02 10/03/89

by KA2DEW

Duplicate at will!



Can't find anyone to packet with? Try the BERK CROWD node. Connect into the network, do a C BERK4, then C CROWD. Type /H for a list of commands on CROWD. If there's nobody on CROWD, wait a while. You'll be there when the next person connects! There's usually 5 or 6 people on in any evening.

W1NY does well in Field Day!

Kudos to the HCRA and Agawam CD members who participated in the W1NY Field Day. W1NY placed 7th in the country overall. Of the 6 stations that scored better than 'NY, Only **one** was in the non-battery class: W2GD, and they only passed W1NY by a mere 330 points! W1NY also accumulated the second highest number of QSO's! Here's some excerpts:

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W2GD 15,430 points 4,702 QSO's 4A 6th place
W1NY 15,100 points 4,994 QSO's 9A 7th place
N6ME 14,772 points 5,390 QSO's 8A 8th place
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(the top five stations were category 5—5 watts or under, and their scores were multiplied by 5, versus W1NY, which ran under 150 watts, or a 2x mult)

See Nov '89 QST p.72 for more info!

VE Exams

Exams are sponsored by the HCRA on the first Wednesday of each month at 7:00PM *sharp* at the Agawam High School. VE's are also needed. If you are interested in taking an exam or helping give exams, please contact Jeanette KA1MEW at 786-1463.

The next exam will be October 4th.

HCRA Meetings

First Friday of each month at
Feeding Hills Congregational Church
Center of Feeding Hills
Intersection of routes 57 & 187
Doors open at 7:30 PM
Meeting starts promptly at 8:00 PM

Local Nets

HCRA 10 Meter Net	Thursday 9:00 PM 28.650
Nutmeg VHF Traffic Net	Daily 9:30 PM 146.28/88
80 Meter Ragchew Net	Tuesday 8:00 PM 3.709 Mhz
WMPN	Daily 6:00 PM 3.937
WMSN	Tuesday & Thursday 7:30 PM 3.713
WMN	Daily 7:00 PM 3.562
WMTN	Monday-Friday 1:00 PM 146.31/91
CPN	Monday-Saturday 6:00 PM 3.965
	Sunday 10:00 AM 3.965
Mt. Tom Information Net	Wednesday 7:30 PM 146.34/94
Mt. Tom Swap Net	Follows Mt. Tom Information Net
Mt. Tom Emergency Net	Sunday 8:45 AM 146.34/94
Agawam Civil Defense Net	Monday 8:00 PM 449.175 & 146.70
RASON	Daily 9:00 PM 146.13/73
WESCON	Daily 8:30 PM 147.78/18
CN	Daily 7:00 & 10:00 PM 3.640
CSN	Monday-Friday 7:30 PM 3.720
CSTN	KY1T PBBS, 145.01 Mhz

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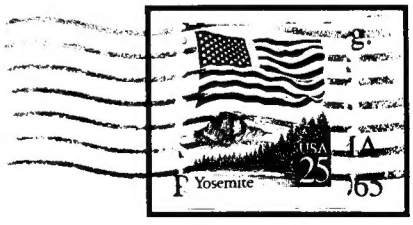

Forwarding & Address
Correction Requested

10/90 AC1T
[redacted]